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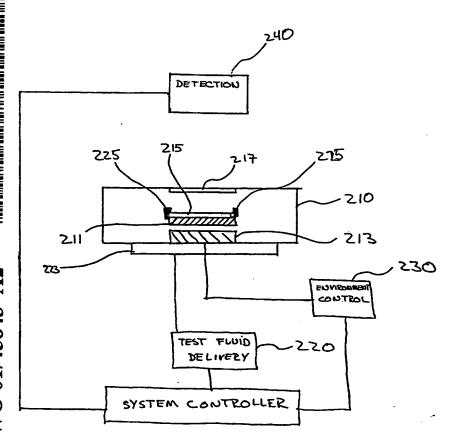
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(54) Title: FLOW-THRU CHIP CARTRIDGE, CHIP HOLDER, SYSTEM AND METHOD THEREOF



(57) Abstract: Α system performing hybridization assays comprises a cartridge for housing a flow through device, where the cartridge includes a test fluid chamber for facilitating a substantially uniform floe of a test fluid mixture through the flow through device, and a fluidics station to deliver the test fluid mixture to the cartridge. The cartridge has a chip holder that holds the flows-through device, which has an array of microchannel passages. The chip holder has a support for placement of the flow though device, the test fluid chamber for directing a substantially uniform flow through device, and a first port that receives the test fluid mixture. The cartridge has a sealing system for preventing the leakage of the test fluid around the flow through device. The test fluid chamber is defined in part by a spade-like surface having an inlet for the test fluid mixture.

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B01L3/00 //B01J19/00 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 7 B01L B01J Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ° Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X US 5 262 128 A (BROWNSTEIN MICHAEL J ET 1-3,7,8,AL) 16 November 1993 (1993-11-16) 29-32, 36,51,52 Y 40,44,48 column 1, line 10 -column 1, line 20 column 3, line 52 -column 3, line 62 column 4, line 6 -column 5, line 24 column 5, line 37 -column 6, line 14 figures 1,2 Further documents are listed in the continuation of box C. Palent family members are listed in annex. Special categories of cited documents: \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannol be considered novel or cannot be considered to "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another involve an inventive step when the document is taken alone document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled citation or other special reason (as specified) \*O\* document referring to an oral disclosure, use, exhibition or other means document published prior to the international fiting date but later than the priority date claimed in the art. "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 22 October 2001 29/10/2001

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Koch, A

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